

Please amend the claims as follows:

1.. (Currently Amended) A breathing air analysis apparatus system for analyzing samples of breathing air substances and determining if said substances pass breathing air purity standards for certification of gas sample quality by a qualified third party other than the user, the apparatus system comprising:

a user facility for providing compressed human breathing air for scuba tanks and emergency air tanks;

a breathing air analysis module situated at said a breathing air user facility for receiving the contents of a breathing air sample, for detecting breathing air purity characteristics and for converting said gas purity characteristics into computer-readable data;

a user facility computer for receiving said computer-readable data connected to an online computer network and for data transmission on-line;

a qualified third party air purity certification site for certifying air purity;

a server accessible on-line by said user facility computer maintained by said a qualified third party certification site situated at a said remote site and electrically coupled to said breathing air analysis module, said server including a data receiver of computer-readable data related to said gas purity characteristics;

said server including a means for storing said computer-readable data related to said breathing air purity characteristics; and

means for determining if said gas sample passes certain gas purity requirements for certification by said qualified third party at said certification site.

2. (Cancelled)

3. (Currently Amended) The breathing air analysis apparatus system of claim 1 wherein said data transmission is via a wireless transmission.

4. (Cancelled)

5. (Currently Amended) The breathing air analysis apparatus system of claim 1 wherein said including a means for informing said user facility if said breathing air sample has passed said breathing air purity requirements comprises comprising an electronic message from said qualified third party certification site.

6. (Currently Amended) The breathing air analysis apparatus system of claim 1 wherein said including a means for informing said user if said breathing air sample has passed said gas purity requirements comprises comprising a printed message from said qualified third party certification site.

7. (Cancelled)

8. (Currently Amended) The breathing air analysis apparatus system of claim 1 further comprising means for storing and printing results of said breathing air sample analysis.

9. (Currently Amended) The breathing air analysis apparatus system of claim 1 wherein said portable breathing air analysis module comprises:

means for collecting and temporarily storing the breathing air sample;
means for detecting breathing air impurities in said breathing air sample; and

data processing means for converting said detected breathing air impurity data into computer readable data, said computer readable data representing breathing air impurity characteristics of said breathing air sample.

10. (Currently Amended) The breathing air analysis apparatus system of claim 1 further comprising means for determining whether said breathing air sample contains oil particle impurities.

11. (Currently Amended) The breathing air analysis apparatus system of claim 1 wherein said means for determining if said breathing air sample passes certain breathing air purity requirements comprises means for comparing said computer-readable data related to said breathing air purity characteristics to a stored set of pre-determined breathing air breathing air purity standards.

12. (Currently Amended) A method of analyzing a breathing air sample for purity without the necessity of transporting the breathing air sample to a remote qualified third party breathing air testing facility and determining if said substances air sample passes pass breathing air purity standards, the method comprising the steps of:

collecting a breathing air sample within a breathing air analysis module situated at a breathing air producer user facility;

determining breathing air purity characteristics of said breathing air sample;

converting said breathing air purity characteristics into computer readable data; and

transmitting through an on-line computer network said computer readable data representing said breathing air purity characteristics from said user facility to a qualified server for certification of use situated at a remote site and electrically coupled to said breathing air analysis module, said server maintained by a qualified breathing air personnel capable of certifying breathing air quality and third party air purity certification site including a receiver for receiving said computer readable data via a data transmitter, said server containing a data storage element for storing said computer readable data;

determining if said breathing air sample passes certain gas purity requirements; and

informing a user said breathing air producer user facility if said breathing air sample has passed said breathing air purity requirements using an on-line response to said user's breathing air producer user facility's computer.

13. (Cancelled)
14. (Original) The method of claim 12 wherein said data transmission is via a wireless transmission.
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Previously Presented) The method of claim 12 wherein said remote site is an accredited breathing air purity testing facility.

19. (Previously Presented) The method of claim 12 further comprising the steps of storing and printing results of said breathing air sample analysis.

20. (Previously Presented) The method of claim 12 ~~wherein said including a~~ means for determining if said breathing air sample passes certain breathing air purity requirements ~~comprises comprising~~ the step of comparing said computer-readable data related to said breathing air purity characteristics to a stored set of pre-determined breathing air purity standards.